

Maine Weekly Influenza Surveillance Report

May 13, 2009

Synopsis

During the week ending May 9th, 2009 (MMWR week 18)*, Maine reported regional influenza activity.

H1N1 (Swine Influenza)

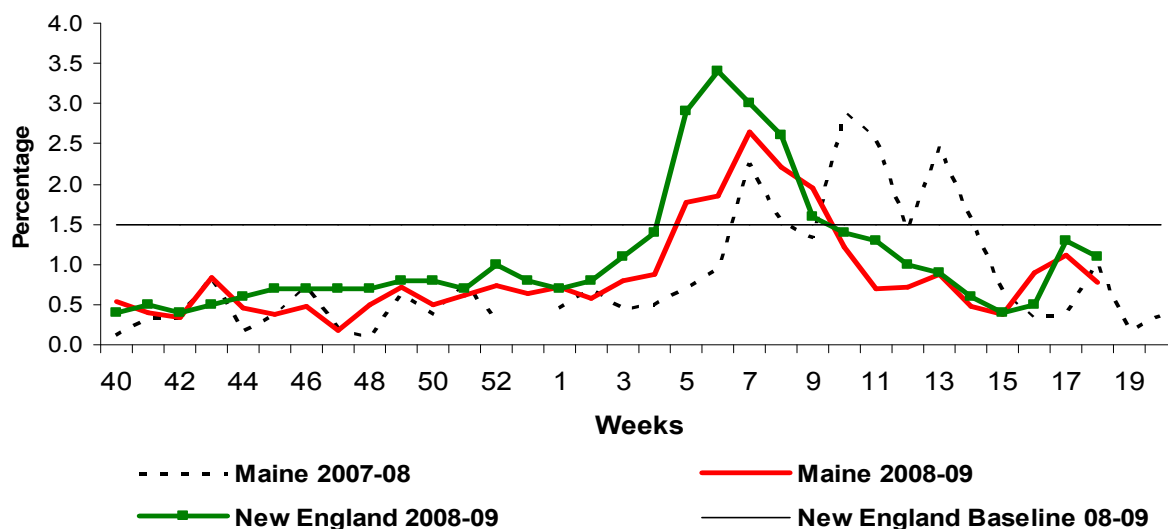
As of May 13th, 2009, Maine had 8 confirmed cases of H1N1 (swine influenza) and 5 probable cases. Additional testing is pending at federal CDC. For the most up to date information on swine influenza, please see our website at <http://www.maine.gov/dhhs/boh/swine-flu-2009.shtml>

Moderate Disease Surveillance

Outpatient influenza-like illness (ILI)

During the week ending May 9th, 2009, 0.8% of outpatient visits reported by seven Maine Sentinel Providers were for influenza-like illness (ILI). ILI is defined as fever ($\geq 100^{\circ}$ F / $\geq 37.8^{\circ}$ C) AND cough or sore throat in the absence of a known cause. In the New England States, 1.1% of outpatient visits were attributed to influenza-like illness during week 18.

Outpatient Visits for Influenza-like Illness – Maine, 2007-09



New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

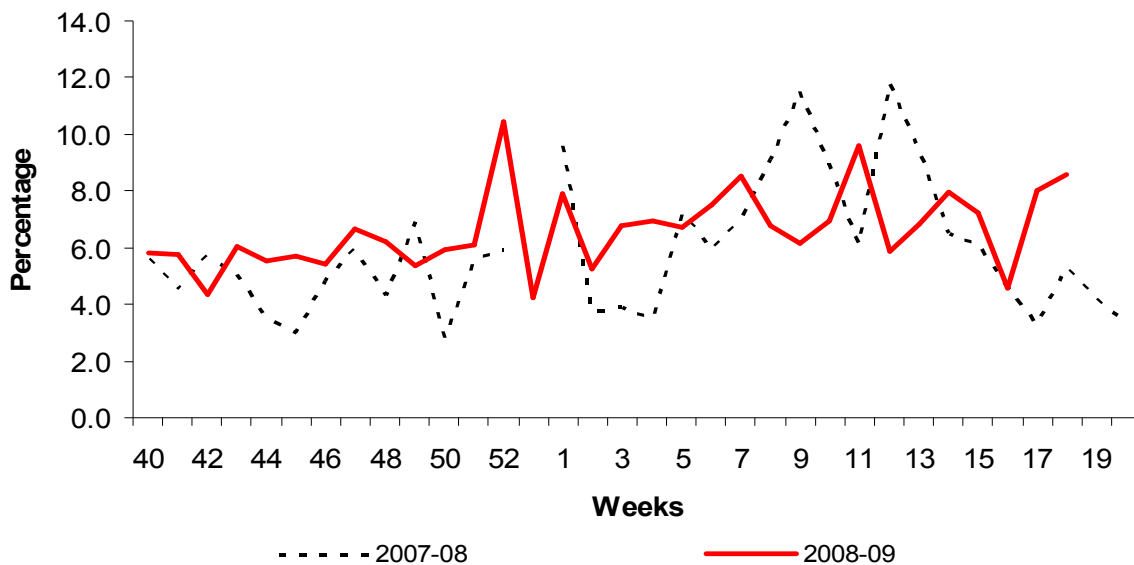
* At time of publication, reporting may be incomplete. Numbers presented here may change as more reports are received.

Severe Disease Surveillance

Hospital inpatients

During the week ending May 9th, 2009, 8.6% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza.

Hospital Admissions Due to Pneumonia or Influenza -- Maine, 2007-09

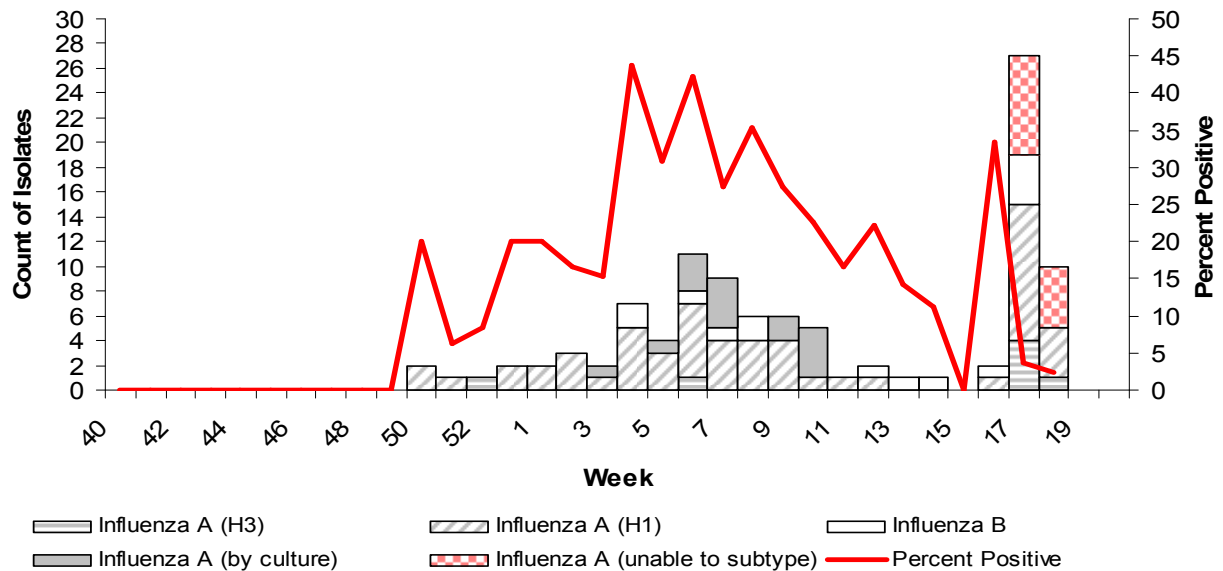


Laboratory Reporting

During the week ending May 9th, 2009, 428 samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). One tested positive for influenza A H3, four tested positive for influenza A H1 (seasonal), and five were unable to be subtyped.

To date, 1,503 samples have been submitted, 105 (7.0%) were positive for influenza: 56 for influenza A H1 (seasonal), seven for influenza A H3, 15 for influenza A (by culture), 13 for influenza A unable to subtype, and 14 for influenza B. The influenza B strains will be forwarded to federal CDC for lineage typing. The influenza A strains which were unable to be subtyped will be forwarded on to federal CDC for further testing.

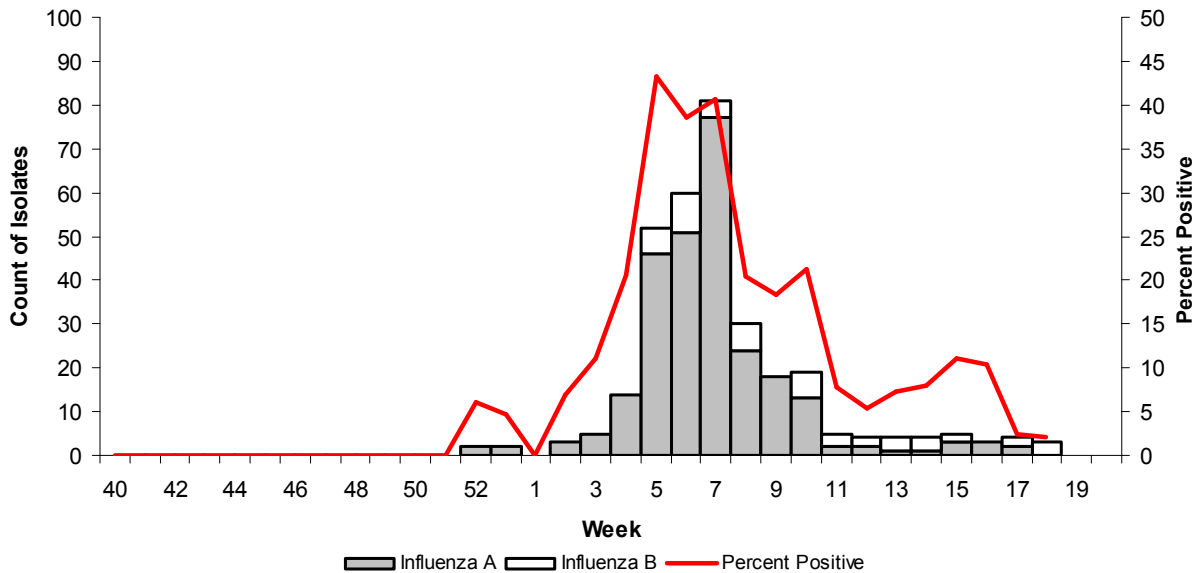
Respiratory Specimens Positive for Influenza from HETL, Maine, 2008-2009



During the week ending May 9th, 2009, 153 samples were submitted for testing to two private reference laboratories; three tested positive for influenza B. Fourteen samples were positive for RSV, and one sample was positive for parainfluenza 3.

A combined total of 2,069 specimens have been submitted since September 28, 2008 for respiratory testing to two private labs. To date, 269 samples were positive for influenza A, 49 samples were positive for influenza B, 323 samples were positive for RSV, 13 samples were positive for parainfluenza 3, six samples were positive for adenovirus, and two samples were positive for enterovirus.

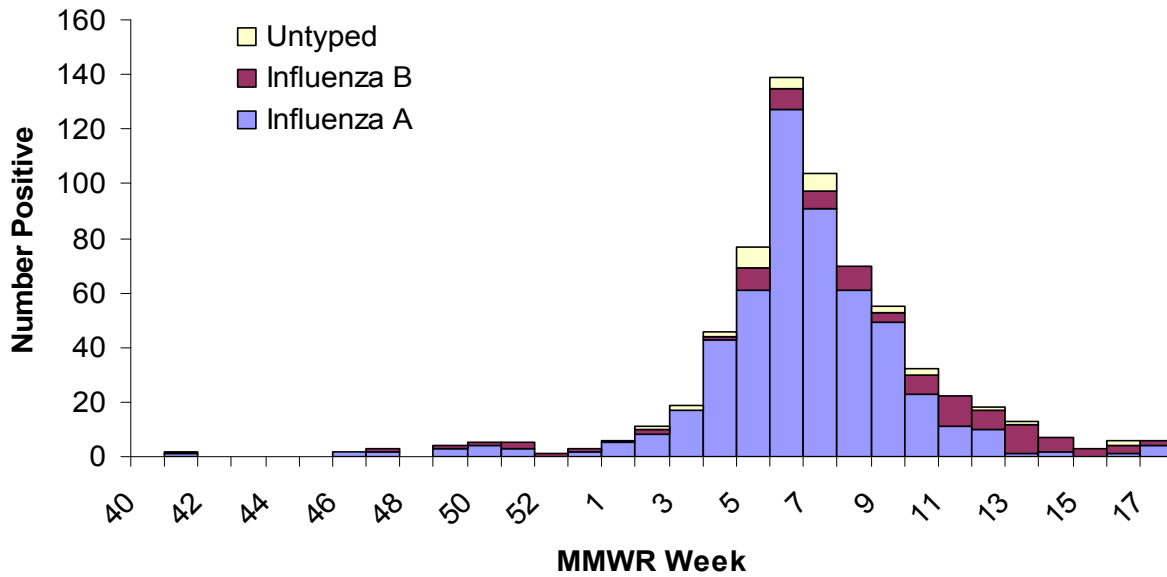
Respiratory Specimens Positive for Influenza from Two Reference Laboratories, Maine, 2008 - 2009



Rapid tests are often used in clinical practice and these results contribute to the determination of the state influenza activity code reported to the federal CDC. Many hospitals, laboratories, and physicians' offices report these test results to the state. There is the possibility of duplication of results from reference labs and the rapid report called into the state. However, since influenza is not required to be reported, it is still assumed that these numbers are an underrepresentation of the true burden of influenza.

During the week ending May 9th, 2009, five samples tested positive using rapid testing, all for influenza B. A combined total of 664 positive rapid tests have been reported this season. 531 were positive for influenza A, 101 were positive for influenza B, and 32 were not typed.

Positive Rapid Influenza Tests, Maine, 2008-2009



Outbreaks

During the week ending May 9th, 2009, no new outbreaks of influenza-like illness were reported. To date, 32 outbreaks of influenza-like illness have been reported; 18 in long term care facilities and 14 in schools.

Influenza-like illness outbreaks by selected characteristics – Maine, 2008-09

| | Facility Type* | District | Date Reported | Attack Rate (%) | | Hospitalizations # | Deaths # | Vaccination rate (%) | | Lab-confirmed |
|----|----------------|------------|---------------|------------------|-------|--------------------|----------|----------------------|-------|-----------------|
| | | | | Student/Resident | Staff | | | Student/Resident | Staff | |
| 1 | LTC | Cumberland | 11/21/2008 | 6 | 1 | 0 | 0 | 100 | 68 | No |
| 2 | LTC | Mid Coast | 1/22/2009 | 4 | 0 | 2 | 0 | 96 | 50 | Influenza A |
| 3 | LTC | Western | 1/26/2009 | 2 | 0 | 1 | 0 | 99 | 50 | Influenza A |
| 4 | LTC | Cumberland | 1/30/2009 | 2 | 0 | 1 | 0 | 96 | 64 | Influenza A |
| 5 | School | York | 2/2/2009 | 26 | 2 | ^ | ^ | ^ | ^ | Influenza A |
| 6 | School | Penquis | 2/4/2009 | 1 | 0 | 1 | ^ | ^ | ^ | Influenza A |
| 7 | School | Mid Coast | 2/9/2009 | 26 | 13 | ^ | ^ | ^ | ^ | No |
| 8 | School | Mid Coast | 2/9/2009 | 27 | 14 | ^ | ^ | ^ | ^ | No |
| 9 | LTC | York | 2/10/2009 | 3 | 0 | 1 | 0 | 95 | 40 | Influenza A |
| 10 | School | Downeast | 2/10/2009 | 4 | ^ | ^ | ^ | ^ | ^ | Influenza A |
| 11 | School | Mid Coast | 2/10/2009 | 19 | 0 | ^ | ^ | ^ | ^ | Influenza A & B |
| 12 | School | Mid Coast | 2/2/2009 | 23 | 5 | ^ | ^ | ^ | ^ | Influenza A |
| 13 | LTC | Mid Coast | 2/10/2009 | 5 | ^ | ^ | ^ | ^ | ^ | Influenza A |
| 14 | School | Mid Coast | 2/10/2009 | 46 | 4 | ^ | ^ | ^ | ^ | Influenza A |
| 15 | School | York | 2/11/2009 | 15 | 15 | ^ | ^ | ^ | ^ | ^ |

| | | | | | | | | | | |
|----|--------|------------|-----------|----|----|---|---|-----|----|------------------|
| 16 | School | York | 2/11/2009 | 15 | ^ | ^ | ^ | ^ | ^ | Influenza B |
| 17 | School | Western | 2/13/2009 | 39 | ^ | ^ | ^ | ^ | ^ | Influenza A |
| 18 | LTC | Mid Coast | 2/17/2009 | 14 | 24 | 0 | 2 | 96 | 20 | Influenza A |
| 19 | LTC | Western | 2/19/2009 | 2 | 0 | 0 | 0 | ^ | ^ | Influenza A |
| 20 | School | Central | 2/23/2009 | 2 | ^ | ^ | ^ | ^ | ^ | Influenza A & B |
| 21 | LTC | Western | 2/23/2009 | 8 | 0 | 2 | 0 | 95 | 40 | Influenza A |
| 22 | School | Western | 2/25/2009 | 15 | 5 | ^ | ^ | 50 | ^ | Influenza B |
| 23 | LTC | Western | 2/25/2009 | 8 | 0 | 0 | 0 | ^ | ^ | Influenza A |
| 24 | LTC | Central | 2/26/2009 | 46 | 22 | 0 | 0 | 100 | 32 | Influenza B |
| 25 | LTC | Cumberland | 2/26/2009 | 2 | 0 | 1 | 0 | 96 | 46 | Influenza A |
| 26 | LTC | Central | 3/3/2009 | 53 | 12 | 3 | 0 | 93 | 68 | Influenza A |
| 27 | LTC | Aroostook | 3/3/2009 | 17 | ^ | 1 | 0 | ^ | ^ | Influenza A (H1) |
| 28 | LTC | Aroostook | 3/3/2009 | 13 | 1 | 0 | 0 | 95 | ^ | Influenza A |
| 29 | LTC | Western | 3/6/2009 | ^ | ^ | 0 | ^ | 100 | ^ | Influenza A |
| 30 | School | Mid Coast | 3/24/2009 | 30 | 0 | ^ | ^ | ^ | ^ | Influenza A & B |
| 31 | LTC | Downeast | 4/21/2009 | 26 | 15 | 2 | 0 | 100 | 98 | No |
| 32 | LTC | Western | 4/20/2009 | 11 | 0 | 1 | ^ | ~67 | ^ | Influenza A |

* Outbreak definition is specific to facility type. An outbreak in long-term care facilities (LTC) is defined as ≥ 3 patients with ILI identified on same floor or ward during a short (e.g., 48-72 hour) period OR ≥ 1 patients with lab-confirmed influenza; an outbreak in an acute care facility (ACF) is defined as ≥ 1 patients with ILI or lab-confirmed influenza with symptom onset ≥ 48 hours post-admission (i.e., nosocomial); and an outbreak in a school is defined as $\geq 15\%$ absentee rate among student population due to ILI or lab-confirmed influenza.

^ Data unavailable

NA indicates not applicable

**Maine DHHS Districts:

York District: York county

Cumberland District: Cumberland county

Western District: Franklin, Oxford, and Androscoggin counties

Mid Coast District: Waldo, Knox, Lincoln and Sagadahoc counties

Central District: Somerset and Kennebec counties

Penquis District: Piscataquis and Penobscot counties

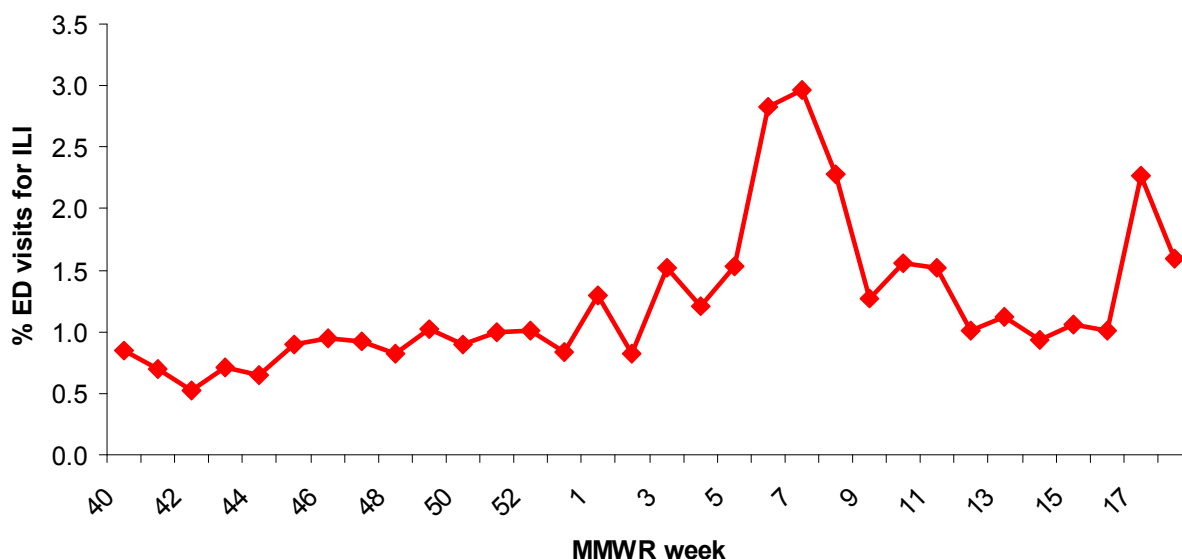
Downeast District: Washington and Hancock counties

Aroostook District: Aroostook county

Syndromic Surveillance

1.6% of visits to emergency departments at seven of Maine's hospitals were characterized as influenza-like illness during week 18, based on the patients' chief complaint.

Emergency Department Visits for ILI at Seven Hospitals – Maine, 2008-09

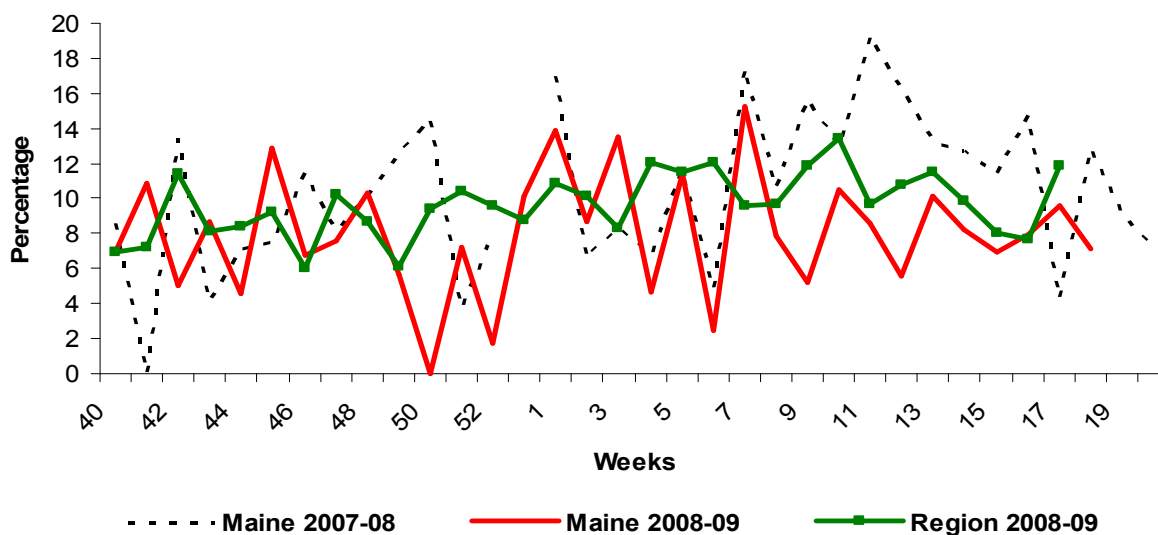


Fatalities Surveillance

Death Certificates

During the week ending May 9th, 2009, 7.1% of deaths reported by three city vital records offices were attributable to pneumonia and influenza.

Percentage of Deaths Attributable to Pneumonia and Influenza – Maine, 2007-09



Pediatric Fatalities

No influenza-associated pediatric deaths in Maine have been reported this season.

National Influenza Activity

State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as: 1) no activity, 2) sporadic, 3) local, 4) regional, or 5) widespread (definitions of these levels can be found at: www.cdc.gov/flu/weekly/usmap.htm). Maine reported regional activity for the week ending May 9th, 2009 (week 18).

